

IN THE CLAIMS

Claims 1-65. (Canceled)

66. (Previously Presented) A microparticle, which is in the form of a wafer whose thickness is from 0.1 μm to 5 μm , wherein the microparticle is marked with digitally-coded machine-readable information, the machine-readable information being etched through the microparticle as a pattern of holes.

67. (Previously Presented) A microparticle according to Claim 66, in which the width and length of the microparticle are both in the range 0.5 μm to 50 μm .

68. (Previously Presented) A microparticle according to Claim 66, in which the microparticle is fabricated by a micro-machining method that includes deposition, masking and etching steps.

69. (Previously Presented) A microparticle according to Claim 66, wherein the machine readable information is in the form of a binary code.

70. (Previously Presented) A microparticle according to Claim 66, wherein the microparticle incorporates an orientation marker.

71. (Previously Presented) A microparticle according to Claim 66, comprising silicon, silicon dioxide or metal.

72. (Previously Presented) A microparticle according to Claim 66, in which the microparticle is metallic.

73. (Previously Presented) A microparticle according to Claim 66, in which the microparticle is aluminum.

74. (Previously Presented) A microparticle according to Claim 66, whose machine readable code is readable by an optical device.

75. (Previously Presented) A microparticle according to Claim 66, in which the code is representative data comprising a multiplicity of bits.

76. (Previously Presented) A microparticle, which is invisible to the naked eye and is in the form of a wafer whose thickness is from 0.1 μm to 5 μm and whose width and length are both in the range 0.5 μm to 50 μm , wherein the microparticle is marked with digitally-coded machine-readable information, the machine-readable information being etched through the microparticle as a pattern of holes.

77. (Previously Presented) A set of a multitude of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm , wherein each microparticle is marked with digitally-coded machine-readable information, the machine-readable information being etched through each microparticle as a pattern of holes.

78. (Previously Presented) A set of microparticles according to Claim 77, all being of substantially the same size and shape.

79. (Previously Presented) A tagging compound comprising a powder, fluid or gas mixed with one or more sets of microparticles, wherein, each set comprising a multiple of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm and each marked with digitally coded machine readable information, the machine readable information being etched through each microparticle as a pattern of holes.

80. (Currently amended) A tagging compound comprising one or more set or sets of microparticles according to Claim ~~77~~79, mixed with a powder, fluid or gas, such that the presence of the microparticles in the mixture is undetectable to the naked eye.

81. (Previously Presented) A tagging compound according to Claim 79, comprising a paint or ink or fluid dye.

82. (Previously Presented) A tagging compound according to Claim 79, comprising a smoke dye.

83. (Previously Presented) A container for tagging an object or objects with a readable code, the container holding a tagging compound comprising a powder, fluid or gas mixed with one or more set or sets of microparticles, wherein each set comprises a multitude of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm and each marked with digitally coded machine readable information, the machine readable information being etched through each microparticle as a pattern of holes, wherein the container is capable of dispensing the tagging compound.

84. (Previously Presented) A container for tagging an object or objects with a readable code, holding a tagging compound according to Claim 79, wherein the container is capable of dispensing the tagging compound.

85. (Previously Presented) A method of marking an object invisibly with a machine readable code, comprising applying to the object a set of a multitude of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm and each marked with digitally coded machine readable information, the machine readable information being etched through each microparticle as a pattern of holes.

86. (Previously Presented) A method of marking an object invisibly with a machine readable code, comprising applying to the object a set of microparticles, wherein the set of microparticles comprises encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm , wherein each microparticle is marked with digitally-coded machine-

readable information, the machine-readable information being etched through each microparticle as a pattern of holes.

87. (Previously Presented) A method of marking a vehicle invisibly with a machine readable code, comprising applying a coat of paint or ink of fluid dye to the vehicle surface, wherein the paint or ink is a tagging compound comprising a powder, fluid or gas mixed with one or more set or sets of microparticles, and wherein each set comprises a multitude of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm and each marked with digitally coded machine readable information, the machine readable information being etched through each microparticle as a pattern of holes.

88. (Previously Presented) A method of marking a vehicle invisibly with a machine readable code, comprising applying to the vehicle a tagging compound comprising a powder, fluid or gas mixed with one or more sets of microparticles, wherein, each set comprising a multiple of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm and each marked with digitally coded machine readable information, the machine readable information being etched through each microparticle as a pattern of holes, and wherein the tagging compound is applied as a coating to the vehicle surface.

89. (Previously Presented) A method of marking an inherently valuable item with a machine readable code invisible to the naked eye, comprising applying to the inherently valuable item a set of a multitude of substantially identically encoded microparticles each invisible to the naked eye and marked with a machine readable code, in which the set of microparticles comprises part of a tagging compound comprising a powder, fluid or gas mixed with one or more set or sets of microparticles, wherein each set comprises a multitude of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm and each marked with digitally coded machine readable information, the machine readable information being etched through each microparticle as a pattern of holes, and is supplied as a transparent hardenable lacquer to the surface of the item.

90. (Previously Presented) The method of claim 89, wherein the inherently valuable item is jewelry.

91. (Previously Presented) A method of marking an inherently valuable item with a machine readable code invisible to the naked eye, comprising applying to the inherently valuable item a set of a multitude of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm , invisible to the naked eye and marked with digitally coded machine readable information, the machine readable information being etched through each microparticle as a pattern of holes, in which the set of microparticles comprises part of a tagging compound comprising a paint or ink or fluid dye, and is applied as a transparent hardenable lacquer to the surface of the item.

92. (Previously Presented) The method of claim 91, wherein the inherently valuable item is jewelry.

93. (Previously Presented) A method of marking an inherently valuable item with machine readable information invisible to the naked eye, comprising applying to the inherently valuable item a set of a multitude of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm invisible to the naked eye and marked with digitally coded machine readable information, the machine readable information being etched through each microparticle as a pattern of holes, in which the set of microparticles comprises part of a tagging compound comprising a paint or ink or fluid dye, and applied selectively as an ink or lacquer.

94. (Previously Presented) The method of claim 93, wherein the inherently valuable item is a plastic card, credit card or charge card.

95. (Previously Presented) A security device for cash machines or other public access dispensing devices, fitted with a container according to Claim 84 in the form of an automatically actable smoke canister filled with the tagging compound which comprises a smoke dye mixed

with one or more set or sets of microparticles, wherein each set comprises a multitude of substantially identically encoded microparticles each in the form of a wafer whose thickness is from 0.1 μm to 5 μm and each marked with digitally coded machine readable information, the machine readable information being etched through each microparticle as a pattern of holes.

96. (Previously Presented) A security device for cash machines or other public access dispensing devices, fitted with a container according to Claim 84 in the form of an automatically actable smoke canister filled with the tagging compound which comprises a smoke dye.